

TECHNICAL INFORMATION

SUBMINIATURE PENTODE

TYPE CK5672

Excellence in Electronics

The CK5672 is a filament type pentode of subminiature construction designed for use as a power amplifier in wearable and portable equipment. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.

MECHANICAL DATA

ENVELOPE: T-2X3 Glass

BASE: None (0.016" tinned flexible leads. Length: 1.5" min. Spacing: 0.048" center-to-center)

TERMINAL CONNECTIONS:

Lead 1 Plate
Lead 2 Grid #2
Lead 3 Filament, positive
Lead 4 Grid #1
Lead 5 Filament, negative: Grid #3

MOUNTING POSITION: Any

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES: (μμfds) ▲

Grid #1 to Plate	0.14
Input	2.8
Output	3.5

RATINGS - ABSOLUTE MAXIMUM VALUES:

Filament Voltage (dc)	1.25± 20% volts
Plate Voltage	100 volts
Grid #2 Voltage	100 volts
Total Cathode Current	5.5 ma.

CHARACTERISTICS AND TYPICAL OPERATION:

Filament Voltage (dc)	1.25 volts
Filament Current	50 ma.
Plate Voltage	67.5 volts
Grid #2 Voltage	67.5 volts
Grid #1 Voltage	- 6.5 volts
Plate Current	3.25 ma.
Grid #2 Current	0.95 ma.
Transconductance	650 μmhos
Plate Resistance	125 kilohms
Load Resistance	20 kilohms
Distortion (approx.)	10 percent
Power Output	65 mw.
Peak AF Signal Voltage	6.5 volts

▲ *Without shield.*

Tentative Data



AVERAGE PLATE CHARACTERISTICS

Conditions:
Ef = 1.25 Vdc
Ec2 = 67.5 Vdc
Ib = ———
Ic2 = – – – –

Ec1 = 0 Volts
- 2 V
- 4 V
- 6 V
- 8 V
- 10 V
- 12 V
Ec1 = 0 Volts

Plate Voltage - Volts: 0, 20, 40, 60, 80, 100, 120

Plate or Grid #2 Current - Milliamperes: 0, 2, 4, 6, 8, 10



SUBMINIATURE PENTODE

AVERAGE PLATE CHARACTERISTICS

Conditions:
Ef = 1.25 Vdc
Ec2 = 45 Vdc
Ib = ———
Ic2 = - - - -

Ec1 = 0 Volts
- 2 V
- 4 V
- 6 V
- 8 V
Ec1 = 0 Volts

0 20 40 60 80 100 120

Plate Voltage - Volts

0 1 2 3 4 5

Plate or Grid #2 Current - Milliamperes



AVERAGE PLATE CHARACTERISTICS
(Triode Connected)

Conditions:
Ef= 1.25 Vdc

Ec1=0 Volts
-4
-8
-12
-16
-20
-24
-28
-32

Plate Current - Milliamperes
12
8
4
0

40
80
120
160
200
Plate Voltage - Volts

AVERAGE CHARACTERISTICS
(Pentode Connected)

Conditions:
Ef= 1.25 Vdc
Eb= Ec2= 67.5 Vdc

rp

Ib

gm

Ic2

Plate Resistance - Kilohms
Transconductance - Micromhos

1400
1200
1000
800
600
400
200
0

Plate or Grid #2 Current - Ma.

9
8
7
6
5
4
3
2
1
0

-15
-10
-5

Grid #1 Voltage - Volts



POWER OUTPUT CHARACTERISTICS

Power Output

Conditions:
Ef= 1.25 volts
Eb= Ec2= 67.5 volts
Ec1= 6.50 volts
Signal Voltage= 4.55 volts RMS

H3

H2

Power Output - Milliwatts: 70, 50, 30

Harmonics - %: 20, 10, 0

Plate Load - Kilohms: 6, 14, 22, 30, 38